REMARKS/ARGUMENTS

Claim 15 has been amended to correct a typographical error. The comma after "polymer" in the last line was deleted in error in the last amendment.

Claims 1-2 and 5-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Pittman, or under 35 U.S.C. 103(a) as being obvious over Pittman.

Pittman discloses cellulose fibers held together by low melt binder fibers. The low melt portion may the entire binder fiber or the low melt portion of a bicomponent fiber. The low melt portion is made from polyolefin. The low melt polyolefin may be high density polyethylene, medium density polyethylene, low density polyethylene, linear low density polyethylene, ultra low density polyethylene, polypropylene or a mixture of these.

An enhancement agent – titanium dioxide, talc, silica, alum, calcium carbonate, calcium oxide, magnesium and other oxides – is dispersed within the low melt polyolefin. See the paragraph beginning on line 15 of column 4. "The particle size, in order to achieve good dispersion within the polymer and good spinnability is in the range of 0.04 to about 5 microns, and preferably in the range of 0.05 to 2 microns. [emphasis added]"

An adhesion promoter is also placed within the low melt polyolefin.

The low melt polyolefin may be used in a bicomponent fiber with a high melt material. Among the high melt materials listed in column 4 is "polyamides, such as nylon 6, nylon 66". According to polymerprocessing.com nylon 6 has a melting point of 220°C and nylon 66 has a melting point of 255°C. The high melt portion of the bicomponent fiber may comprise 95% of the weight of the bicomponent fiber.

In example 1 the binder fibers are mixed with the pulp fibers and heated in a hot air oven at 143 or 166°C for 30 seconds to bond the binder fibers to the cellulose fibers and to each other. These temperatures are well below the melting point of nylon 6 or nylon 66.

The examiner has stated that the polyamides of Pittman et al are water soluble. The examiner's basis for this statement is the belief that applicant has admitted on lines 1-5 of page 3 that polyamides are water soluble. The cited passage is:

> "More generally the retention aids are very high molecular weight cationic water soluble polymers that act as polyelectrolytes. As such, they act as bridges linking filler particles to fibers. Typically they are polyacrylamides, polyamines, polyethyleneimines, polyamidoamines, or polyethylene oxides.

Is it possible that 'polyamines" in the cited passage has been misread as "polyamides"?

The only polyamides mentioned by Pittman et al are nylon 6 and nylon 66. Pittman uses them as the high melt portion of a bicomponent binder fiber. Applicants have not admitted in the cited passage or anywhere else in the application that nylon 6 or nylon 66 is water soluble. Applicants know of no reference that states that either nylon 6 or nylon 66 is water soluble.

Pittman does not have a water soluble bicomponent fiber and gives no reason for wanting or needing a water soluble bicomponent fiber. The purpose of the Pittman bicomponent fibers is to maintain pad integrity. See the sentences beginning on line 23 of column 1 and on line 31 of column 1.

> [column 1, line 23] "Webs made from the binder fibers of the present invention are useful in diapers, incontinence pads, sanitary napkins and other absorbent pads for liquids."
>
> [column 1, line 31] "However, there is always a need to improve these products and particularly in terms of their adhesion such that they do not fall apart during manufacturing, processing into articles, and during use." [emphasis added]

The rejection appears to be that Pittman et al disclose polyamides therefore Pittman et al disclose a water soluble polyamide. Pittman et al, however, only disclose nylon and nylon is not water soluble. There is a reason that it is not water soluble. It is used in pads for absorbing liquids and is to make sure the pad does not fall apart during use. A water soluble fiber would allow the absorbent pad for liquids to fall apart during use.

Pittman et al do not disclose a bicomponent fiber which is 95% water soluble because such a fiber would not allow the Pittman et al fiber to do what it is supposed to do. The fiber's purpose is to keep the pad from falling apart and if it dissolves during use then the pad falls apart.

Pittman et al give no reason for substituting a water soluble bicomponent fiber for the water insoluble bicomponent fiber. The substitution of a water soluble bicomponent fiber for the water insoluble bicomponent fiber of Pittman et al would go against the teaching of Pittman et al which is to maintain the integrity of the pad during use.

Claim 3 stands rejected under 35 U.S.C. 102(a) as being unpatentable over Pittman et al in view of Hochwalt. Hochwalt is cited for the disclosure of zeolites. The combination of Pittman et al and Hockwalt does not disclose the claimed invention for the reasons stated above. Pittman et al neither discloses nor suggests the use of a water soluble retention aid.

CONCLUSION

It is respectfully requested that the rejections be withdrawn and the case passed to issue.

Respectfully submitted,

WEYERHAEUSER COMPANY

John M. Crawford
Registration No. 19,670
Direct Dial No. 253-924-5611